

REMARKS

Claims 1-3, 5-16, 34, and 36-42 are currently pending in the subject application and are presently under consideration. Claims 1, 2, 3, 6 and 12 have been currently amended while new claim 42 has been added as shown on pages 2-5 of the Reply. Applicants' representative thanks the Examiner for the teleconference of October 14, 2008 wherein merits of the claims vis-à-vis the cited documents were discussed.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 1-3, 5-16, 34, and 36-41 Under 35 U.S.C. §101

Claims 1-3, 5-16, 34, and 36-41 are rejected under 35 U.S.C. §101 as allegedly failing to provide a 'useful, concrete, and tangible' result. Withdrawal of this rejection is requested for at least the following reasons. The claims are directed towards statutory subject matter that produces a 'useful, concrete and tangible result'. The claimed subject matter relates to ranking search results obtained by searching message boards, Usenet etc. Accordingly, independent claim 1 recites "***a second component that generates ordered search results based on their respective relevances wherein the search is selectively scoped based at least on a structure of the one or more messages.***" Similarly, claim 37 recites "***means for generating ordered search results based on their respective relevances***". Thus, the claimed subject matter relates to producing a useful, concrete, tangible result of ordered search results based on their relevance scores. Additionally, independent claims 1, and 37 have been amended herein to clearly illustrate that elements within such claims are associated with a computer. Accordingly, these claims include functional descriptive material within a computer, thereby rendering the claimed subject matter structurally and functionally interrelated to the computer and therefore directed to statutory subject matter producing the aforementioned useful, concrete, tangible result. Hence, this rejection should be withdrawn.

II. Rejection of Claims 1-3, 5-7, 11, 13, 34, and 36-41 Under 35 U.S.C. §103(a)

Claims 1-3, 5-7, 11, 13, 34, and 36-41 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Knight, *et al.* (US 6,493,703), in view of Williams, *et al.* (US 2004/0210550), in view of Holtzman, *et al.* (US 7,185,065), in further view of Bates, *et al.* (US 6,963,902). This

rejection should be withdrawn for at least the following reasons. None of the cited documents, alone or in combination teach or suggest all aspects of the subject claims.

The claimed subject matter generally relates to electronic data searches and more particularly to employing relevance function(s) to rank search results obtained from one or more collections of digital artifacts. To this end, independent claim 1 recites *a second component that generates ordered search results based on their respective relevances wherein the search is selectively scoped based at least on a structure of the one or more messages*. Similarly independent claim 37 recites *means for generating ordered search results based on their respective relevances wherein the search has variable scope based at least on a structure of one or more messages comprising at least a message core with text of a single message within the global thread and a message body including text of a plurality of messages structurally related to the single message within the global thread*. None of the cited documents teach nor suggest such claimed aspects.

Williams, *et al.* relates to facilitating a self organizing workforce of one or more workers through payment and recognition incentives, a set of configurable operating rules and a set of credentials to represent the reputations and organizational capital of individual workers. It also discloses a message board format to facilitate count of votes post credit, agreement or disagreement, named or anonymous posters and combining them with message board attributes such as thread depth etc. and semantic analysis techniques to extract concepts (*See Williams, et al.* paragraph [0102]). In this context, although Williams, *et al.* teaches using thread properties such as thread depth with semantic analysis to extract concepts, it fails to teach or suggest scoping a search of a discussion board comprising messages based on a structure of the message as recited in the subject claims.

Knight, *et al.* relates to monitoring that subscriber tastes and interests of online message board systems so that relevant content can be located extracted and presented in accordance with subscriber derived feedback information. Accordingly Knight, *et al.* teaches performing queries on pre-defined logical groupings of subject matter already constructed for users' convenience (*See Knight, et al.* col.15 lines 53-55) it fails to teach or suggest scoping a search based on a message structure.

Holtzman, *et al.* relates to collecting and analyzing electronic discussion messages to categorize the message communications in order to identify trends and patterns in pre-

determined markets. Accordingly, electronic messages are collected and analyzed in accordance with characteristics and data inherent in the messages. However, nowhere does Holtzman, *et al.* teach or suggest an analysis such that a search is scoped in accordance with a message structure as recited in the subject claims.

Bates, *et al.* relates to selectively displaying messages to a user. Based on the time of viewing a message and statistics on how many times a message is skipped, time scores and skip scores are calculated. When a user requests to view messages, they are displayed based on their respective time/skip scores in order to omit those with minimum time scores/maximum skip scores. However, Bates, *et al.* also fails to teach or suggest scoping search for messages based on a structure of the message as recited in the subject claims.

Within message boards a discussion thread can comprise a plurality of posted messages wherein each message may have a different structure. For example, some messages may have only a message core (text of a single message excluding parent/children etc.) while others may include a previous message or even a root message that is a starting point of the discussion. In accordance with the subject claims, the search over such messages can be scoped in a variety of ways so that the search can be confined only to the message core or alternatively the search may span the entire message body including the parent messages (*See* applicants' specification as filed page 15 lines 5 – 13). Additionally, when determining features for relevance functions in order to determine messages relevant to a query, the text based relevance scores of different scopings can be utilized as separate features for the ranking function as recited in amended dependent claim 41 and new claim 43. Likewise, features can be based on a comparison between the text-based relevance scores with different scopings as recited in the independent claim 37 (*e.g.*, the ratio of tf/idf for message core scoping to tf/idf for message child scoping). (*See* applicants' specification as filed page 16 lines 10-21). This facilitates locating the exact messages that are most relevant for a given query within a discussion thread.

On page 7 of the subject Office Action, it is erroneously contended that Holtzman, *et al.* teaches scoping a search based on a message structure (*See* comments in the subject Office Action with regards to claim 41). However, Holtzman, *et al.* does not teach or suggest scoping a search based on different parts of a message thread and hence fails to further teach or suggest utilizing comparison between different relevance scores obtained by scoping search over different parts of a message thread for ranking them as recited in independent claim 37.

In view of at least the foregoing, it is clear that none of the cited documents teach or suggest all aspects of the subject claims. Hence, this rejection should be withdrawn.

III. Rejection of Claims 8-9 and 12 Under 35 U.S.C. §103(a)

Claims 8-9 and 12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Knight, *et al.*, in view of Williams, *et al.*, Holtzman, *et al.*, and Bates, *et al.*, and in further view of Official Notice. Withdrawal of this rejection is requested for at least the following reasons. As discussed *supra*, Knight, *et al.* Williams, *et al.*, Holtzman, *et al.*, and Bates, *et al.* do not teach or suggest all the claim features with respect to amended independent claim 1 (which claims 8, 9 and 12 depend from). Examiner's Official Notice does not make up for the aforementioned deficiencies of the cited references. In view of at least the foregoing, it is clear that none of the cited documents and Official Notice teach or suggest all aspects of the subject claims. Hence, this rejection should be withdrawn.

III. Rejection of Claims 10 and 14-16 Under 35 U.S.C. §103(a)

Claims 10 and 14-16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Knight, *et al.*, in view of Williams, *et al.*, Holtzman, *et al.*, and Bates, *et al.*, and in further view of Vanderveldt, *et al.* (US 6,266,668). As discussed *supra*, Knight, *et al.* Williams, *et al.*, Holtzman, *et al.*, and Bates, *et al.* do not teach or suggest all the claim features with respect to amended independent claim 1 (which claims 10 and 14-16 depend from). Vanderveldt, *et al.* relates to a method of data mining wherein a search profile is created to determine topics of interest. These topics are output to a search specific tool that match the topics to web sites which are filtered to determine if they contain the relevant information before being presented to the user. However, it does not make up for the aforementioned deficiencies of the cited references as it fails to teach or suggest scoping searches of discussion threads based on a structure of one or more messages being search. In view of at least the foregoing, it is clear that none of the cited documents teach or suggest all aspects of the subject claims. Hence, this rejection should be withdrawn.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP594US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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